

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

July 18, 2012

Via Facsimile

Mr. Richard Cowan Chief Financial Officer Cannabis Science, Inc. 6946 N. Academy Blvd, Suite B #254 Colorado Springs, CO 80918

Re: Cannabis Science, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2011

Filed April 16, 2012

Form 10-Q for the Fiscal Quarter Ended March 31, 2012

Filed May 21, 2012 File No. 000-28911

Dear Mr. Cowan:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filings and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2011

Financial Statements, page F-1

Statements of Cash Flows, page F-6

1. Please amend your filing to remove the duplicate information pertaining to your Statement of Shareholders' Deficit, which appears on this page, and include your Statements of Cash Flows.

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Controls and Procedures, page 12

Changes in Internal Controls over Financial Reporting, page 13

2. You state there had been no change in your internal controls over financial reporting that occurred during the period covered by this report. In future filings, including any amendments to this Form 10-K, please indicate whether any change in internal control over financial reporting occurred during the last fiscal quarter. See Item 308(c) of Regulation S-K for further guidance.

Directors, Executive Officers, and Corporate Governance, 14

3. Please revise your disclosure to identify all of your executive officers and provide corresponding Item 401(b) information. For example, we note your disclosure on page 4 regarding Dr. Mohammad Afaneh serving as your new Chief Operating Officer; please provide Item 401(b) information regarding Dr. Afaneh. For guidance, see Question 116.01 of the Regulation S-K Compliance and Disclosure Interpretations, available on our website at: http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm.

Certain Relationships and Related Transactions, and Director Independence, page 17

4. It appears that this section of your disclosure is incomplete, insofar as you state that "During the year the following transactions occurred between the Company and certain related parties," but you do not complete the sentence. Please provide the information required by Item 404(a) of Regulation S-K or, alternatively, confirm to us that there are no transactions that are required to be reported.

Exhibit Index

5. It appears that you have not filed a number of exhibits which are required to be filed, or incorporated by reference, with your Form 10-K. For example, we note the following missing exhibits which appear to be material: the license agreement with Rockbrook, Inc., referred to on page 4; the debt settlement agreements referred to on pages 7-8; and the 2011 Stock Compensation Plan documentation referred to on page F-15. Please review Item 601(b) of Regulation S-K and file all missing exhibits.

Form 10-Q for the Fiscal Quarter Ended March 31, 2012

6. Similarly, please file an amendment to your Form 10-Q to file the following exhibits: the agreements with Dr. Afaneh and Mr. Brogue, referred to on page 4 of your Form 10-K; the license agreement with Apothecary Genetics Investments LLC, referred to on page 4 of your Form 10-K; the agreements pursuant to which you acquired GGECO University, Inc. and Cannabis Consulting Inc., referred to on pages 4-5 of your Form 10-K; the 2012 Equity Compensation Plan documentation, referred to on page F-18 of your Form 10-K;

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and the management consulting agreements referred to on page F-10 of your Form 10-Q. See Item 601(b)(10) of Regulation S-K, including Instruction 2. For guidance on preparing the Form 10-Q amendment, see Exchange Act Rule 12b-15 and Question 161.01 of the Exchange Act Rules Compliance and Disclosure Interpretations, available on our website at: http://www.sec.gov/divisions/corpfin/guidance/exchangeactrules-interps.htm.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Donald F. Delaney, Staff Accountant, at (202) 551-3863, or Ethan M. Horowitz, Branch Chief, at (202) 551-3311, if you have questions regarding comments on the financial statements and related matters. Please contact Alexandra M. Ledbetter, Staff Attorney, at (202) 551-3317, or me, at (202) 551-3745, with any other questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall Assistant Director